

# ***VIRGINIA SPIRAEA***

Scattered through the Appalachian regions of seven states, Virginia spiraea grows on gravel bars and banks of swift flowing streams and rivers. Even though the range of this plant covers a fairly large geographic area, in no portion of its range is it considered common. Virginia spiraea is listed as either threatened, endangered or extirpated in every state in which it is known to occur. Virginia spiraea was listed as Federally threatened by the U.S. Fish and Wildlife Service in 1990.

## ***How To Recognize Virginia Spiraea***

Virginia spiraea (*Spiraea virginiana*) is a shrub in the Rose family (Rosaceae) that can grow to a height of 9 feet. With simple or branched, arching aerial stems that arise from a network of underground stems this plant can cover large areas of ground. The leaves are whitish underneath, and are long and narrow, and taper to the base with nearly smooth edges or with a few teeth near the tip. The individual flowers are quite small and have five creamy white rounded petals. Although the individual flowers are small, they are grouped into large showy clusters, up to 5 inches wide, at the ends of the stems.

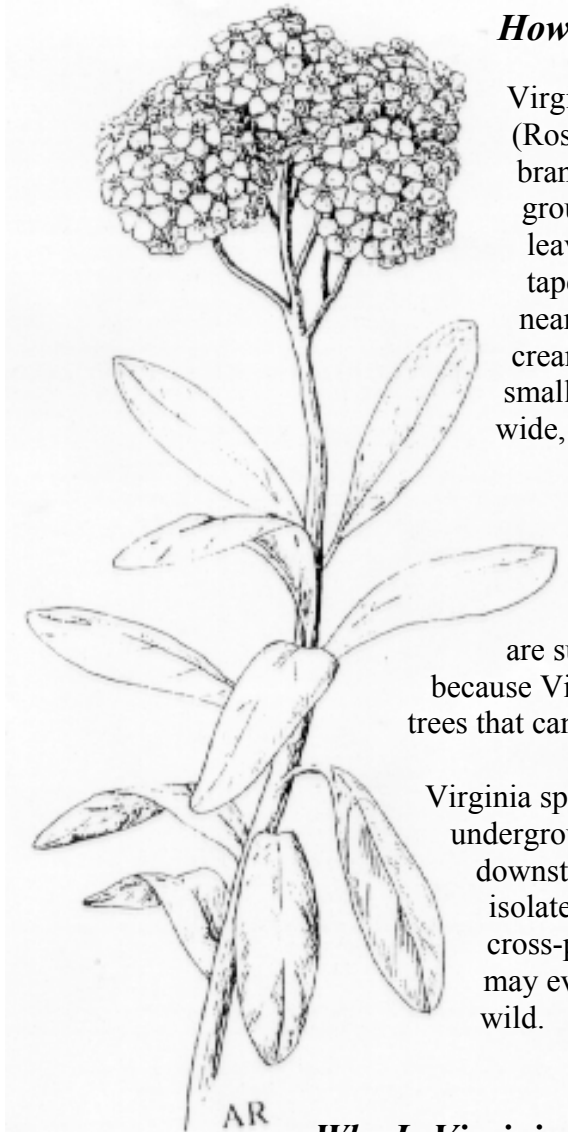
## ***Habitat And Biology***

Virginia spiraea grows naturally only on gravel bars and banks of high quality, swift flowing streams and rivers that are subject to periodic flooding. These floods are important because Virginia spiraea grows best in full sun and flooding topples trees that can out compete it for sunlight.

Virginia spiraea is thought to now only reproduce by its spreading underground stems or by portions of plants breaking off and washing downstream. It has become so rare and individual populations so isolated that it is not known to set fertile seed due to lack of proper cross-pollination. Although populations often flower profusely and may even produce fruit, no seedlings have been observed in the wild.

## ***Why Is Virginia Spiraea So Rare?***

Threats to Virginia spiraea are both human induced and biological. Human induced threats come on two fronts, watershed development and the introduction of non-native species. Although the effects of uncontrolled development are sometimes subtle, they are cumulative, and can cause changes in water quality and stream flow that can affect populations. Sometimes development threats are not so subtle, such as dams built for navigation, recreation, and flood control. Dams



both permanently inundate long stretches of stream bank, destroying any existing populations upstream, and can change the flow of the river system downstream. Another threat is competition from exotic plant species. Some plants not native to North America grow well along streams in the Southern Appalachians, and these non-native plants often form solid colonies that eliminate native species. These non-native competitors include Japanese knotweed (*Polygonum cuspidatum*), Multiflora rose (*Rosa multiflora*), and Japanese spiraea (*Spiraea japonica*). Biologically, individual populations of Virginia spiraea have become so isolated that they do not produce viable seed. This severely limits the plant's ability to disperse and colonize new habitat.

### ***Why Should We Be Concerned About The Loss Of Species?***

Extinction is a natural process that has been occurring since long before the appearance of man on Earth. However, the rate of extinction has increased many times in the last few centuries. Species are becoming extinct because of loss of habitat due to air and water pollution and conversion of the landscape for other uses.

All living things are part of a complex web of life. The removal of a single species can in turn cause the loss of other species that depend upon it. Each extinction diminishes the diversity and complexity of life on earth and ultimately jeopardizes the health of the human environment. Also, wild plants and animals are a storehouse of resources for food, medicines and other products.

### ***The Federal Endangered Species Act***

The Endangered Species Act of 1973 (The Act) recognizes that many of our nation's valuable plant and animal resources have been lost and that other species are close to extinction. The Act provides a means to help preserve these species and their habitats for future generations.

### ***How you can help:***

- Learn about endangered species, especially those in your area.
- Protect natural areas from clearing, trash dumping, and other intensive use. Stay on designated trails in pristine natural areas.
- If you find Virginia spiraea, contact the Kentucky State Nature Preserve Commission.
- Don't collect wild plants or buy wild collected plants.
- Be a good land steward and participate in the protection of our environment.
- Volunteer with the Kentucky State Nature Preserves Commission



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